## DEPARTMENT OF THE ARMY



BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO
ATTENTION OF:
Environmental Analysis Team

June 21, 2001

SUBJECT: Section 14 Emergency Streambank Protection Project – Cuyahoga River along Bath Road in the City of Akron; Summit County, Ohio.

## SCOPING FACT SHEET #2

## TO ALL INTERESTED PARTIES:

The United States Army Corps of Engineers (USACE), Buffalo District, is currently designing a streambank erosion control project along the Cuyahoga River, adjacent to Bath Road in the City of Akron, Summit County, Ohio (Figures 1 and 2). The purpose of this letter is to update/notify interested parties of a modified design for the project. The initial "Scoping Fact Sheet" for the proposed project was distributed on June 6, 2000.

Bath Road is located adjacent to the Cuyahoga Valley National Recreation Area (CVNRA), and is a two-lane route that is often used to reach this frequently visited area. Also adjacent to the proposed project area is a large great blue heron nesting area, located on the south side of Bath Road. A parking and observation area has been constructed on the north side of Bath Road for viewing the great blue heron nesting area. The nesting area is located on the opposite side of the street from the project area, and the parking and observation area is located approximately 500 feet east from the affected portion of the River. The area of concern is located along the north side of Bath Road just downstream of the Cuyahoga River's confluence with Yellow Creek. Erosion has occurred along an approximately 535 feet long section of the river, downstream of the Bath Road Bridge. The southeastern bank of the river in this area is being eroded, and continued erosion along this portion of the bank may compromise the stability of Bath Road, due to this portion of the road's close proximity to the river. Several trees have fallen and others are in the process of falling along this moderate to heavily vegetated portion of the riverbank, creating a safety hazard in both the river and on the road.

The initially proposed protection plan involved a rubblemound stone revetment, which would cover approximately 535 feet of the southeastern bank of the Cuyahoga River. The design included 27 inches of 18-inch riprap at the toe, extending on a 1V:2H slope to a point approximately half way up the bank to an existing low bank. Additionally, to offset the encroachment of riprap into the creek from the southeastern bank, some shoals along the northwestern bank would have been excavated from the river, as necessary.

After receiving several comments regarding this protection, and conducting investigations on adjacent sites in the area, USACE has determined that a more environmentally beneficial and

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aesthetically pleasing plan would be more appropriate for the subject site. Consequently, USACE proposes to implement a Tri-Lock Block (or similar) Articulated Block Erosion Control system along the eroded portion of the Cuyahoga River, in lieu of a riprap revetment. The articulating cellular concrete block system is a block structure installed over a geotextile filter fabric. The cellular blocks are made of portland cement concrete cast into "lock" blocks and "key" blocks to provide a three-directional interlock to resist lateral movement. Figure 3 depicts Tri-Lock's 4000 series key and lock block combination with 1.54-square foot area coverage. However, USACE is considering implementing Tri-Lock's 4100 series block. This series has a 2-square foot area coverage, and offers the additional benefits of lower production costs from the block plant, and a larger key block, which is heavier than the 4000 series key block thereby reducing its uplift potential. The articulating cellular concrete block system is a "flexible" concrete revetment which allows the blocks to traverse changes in terrain without disruption of the placement pattern and interlock feature. Once assembled, the block system contains 80 percent concrete blocks and an average of 20 percent gaps, or open space. The open areas would be filled with topsoil and subsequently seeded with various types of suitable ground vegetation that are native to the project area.

This type of protection would offer many benefits in comparison to a riprap revetment. The block system would offer adequate protection while allowing easy and safe access to the waters edge. It is also expected that this protection would be installed at a lower price than a traditional riprap revetment, although a final estimate has not been completed. This protection would also be much more aesthetically pleasing than a stone revetment. The blocks would create a relatively flat and smooth slope, and once the vegetation grows amongst the blocks, much of the protection above the waterline would be obscured. This would create a much more natural appearance along this portion of the river, and the vegetation would also serve as habitat for many small mammals and bird species.

USACE is currently in the process of preparing an Environmental Assessment (EA) and Section 404(a) Public Notice and Section 404(b)(1) Evaluation for this project. Once completed, these documents will be distributed for a 30-day public review and comment period. If no significant comments or concerns are received during this period, and assuming all comments or concerns can be adequately addressed, the District Commander will sign a Finding of No Significant Impact (FONSI).

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Any questions or comments pertaining to this matter should be directed to Mr. Jay M. Miller, Biologist, of the Environmental Analysis Section. Mr. Miller can be contacted by calling (716) 879-4394 (FAX: (716) 879-4355; e-mail address: james.m.miller@lrb01.usace.army.mil) or by writing to the above address. Thank you for your interest in this project.

Sincerely,

David J. Conboy, P.E

Team Leader

**Environmental Analysis Section** 

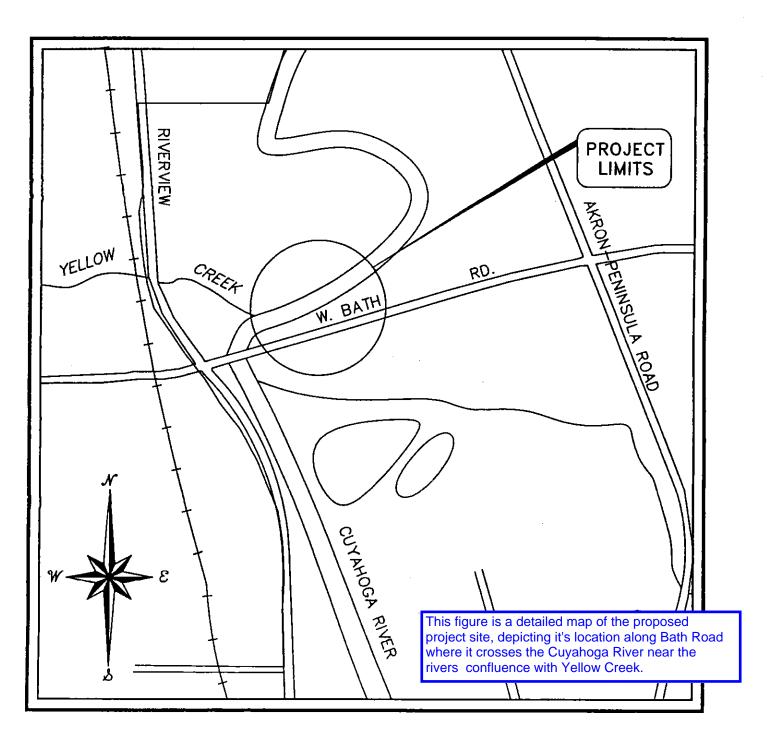
Attachments



FIGURE 1: Project Site

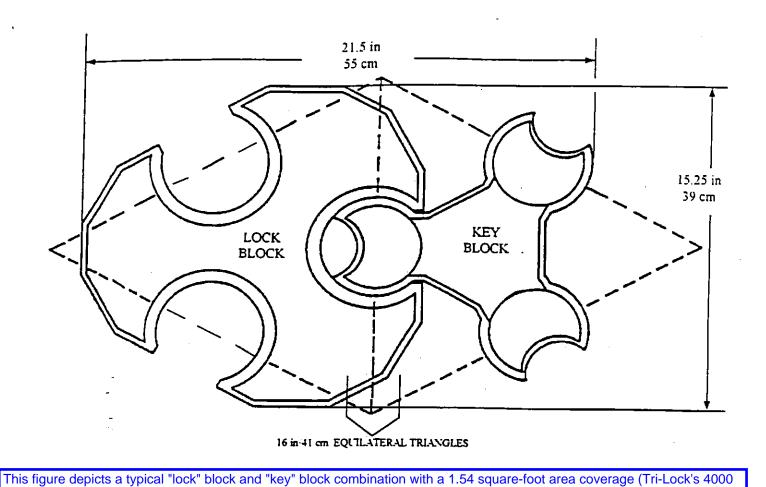
This figure is an overview map of northeastern Ohio which depicts the geographical location of the proposed project site, which is located in the city of Akron, Summit County, Ohio.

## BATH ROAD EROSION SITE CUYAHOGA RIVER



VICINITY MAP

FIGURE 2: Project Vicinity Map



Series). USACE is considering implementing Tri-Lock's 4100 series block, a larger system which would cover a 2-square-foot area, with lower production costs and reduce uplift potential as a result of its greater weight.